#### 3.2 DRINKING INVOLVEMENT

This section presents a series of data displays which identify drinking involvement in Missouri's traffic crash experience. Drinking-involved traffic crashes are defined as any crash in which one or more drivers or pedestrians were drinking and, in the opinion of the investigating officer, their intoxicated condition contributed to the cause of the crash. Data displays also are presented which identify characteristics of the drinking driver or pedestrian involved in these traffic crashes.

There are strong indications that investigating officers under-report drinking involvement as a contributing factor in traffic crashes. Under-reporting exists for a number of reasons. First, symptoms of drinking may be masked from the investigating officer. The person's physical instability may be attributed to the shock of being in a crash or resulting physical injuries rather than to intoxication. Second, the investigating officer may not have an opportunity to observe or interview the person for an extended time period in cases where they require immediate medical attention and are transported from the scene. Finally, in cases where the investigating officer does determine a person has been drinking, there may not be enough evidence to indicate that their intoxicated condition contributed to the cause of the traffic crash. As a result, the apparent problem of under-reporting should be taken into consideration when evaluating data presented in this section.

#### 1999 SUMMARY ANALYSIS

- o Of all 1999 Missouri traffic crashes, 4.6% were drinking related. Of all fatal traffic crashes, 20.9% were drinking related. A total of 217 persons were killed and 6,283 were injured in drinking-related traffic crashes.
- o There was a decrease of 2.7% in the rate of change when comparing total 1999 drinking-related traffic crashes with those in 1998. There also was a decrease of 17.6% when comparing 1999 fatal drinking-related traffic crashes with 1998.
- In 1999, one person was killed or injured in drinking-related traffic crashes every 1.3 hours in the State of Missouri.
- o Of all drinking-related traffic crashes, 60.0% occurred on Friday, Saturday, or Sunday and 65.2% occurred between 7:00 P.M. and 2:59 A.M.
- **o** Of the persons drinking in 1999 traffic crashes, 98.7% were driving a motorized vehicle, 0.1% were driving a non-motorized vehicle, and 1.2% were pedestrians.
- **o** Of the drinking drivers of motorized vehicles, 81.9% were male and 18.1% were female. The average age of drinking drivers of motorized vehicles was 33.4 years.
- o All of the drinking drivers of non-motorized vehicles were male. The average age was 40.6 years.
- **o** Of the drinking pedestrians, 80.6% were male and 19.4% were female. The average age of drinking pedestrians was 35.7 years.
- o Of the drinking drivers of motorized and non-motorized vehicles involved in 1999 crashes, 57.6% were driving an automobile, 28.1% were driving a pickup truck, and 7.3% were driving a sport utility vehicle at the time of the crash.

#### 1999 MISSOURI TRAFFIC CRASHES

#### DRINKING INVOLVEMENT

|                      | FATAL | %     | PERSONAL<br>INJURY | %     | PROPERTY<br>DAMAGE | %     | TOTAL   | %     | TOTAL<br>KILLED | NUMBER¹<br>INJURED | PEDES | G DRIVERS /<br>TRIANS²<br>INJURED |
|----------------------|-------|-------|--------------------|-------|--------------------|-------|---------|-------|-----------------|--------------------|-------|-----------------------------------|
| DRINKING INVOLVED    | 196   | 20.9  | 3,977              | 8.2   | 4,208              | 3.1   | 8,381   | 4.6   | 217             | 6,283              | 120   | 3,187                             |
| NO DRINKING INVOLVED | 741   | 79.1  | 44,811             | 91.8  | 129,860            | 96.9  | 175,412 | 95.4  | 847             | 69,614             | -     | -                                 |
| UNKNOWN <sup>3</sup> | 27    | -     | 1,835              | -     | 8,235              | -     | 10,097  | -     | 30              | 2,420              | -     | -                                 |
| TOTAL                | 964   | 100.0 | 50,623             | 100.0 | 142,303            | 100.0 | 193,890 | 100.0 | 1,094           | 78,317             | 120   | 3,187                             |

<sup>&</sup>lt;sup>1</sup>This statistic indicates the total number of persons killed and injured in a crash where one or more drivers or pedestrians were drinking.

**TABLE 3.2.1** 

<sup>&</sup>lt;sup>2</sup>This statistic indicates the number of drinking drivers or pedestrians killed and injured.

<sup>&</sup>lt;sup>3</sup>Crashes were classified as unknown if there was no indication that drinking was involved and the contributing circumstances of one or more drivers or pedestrians were not known.

#### 1998 and 1999 DRINKING-INVOLVED CRASH ANALYSIS

|                 | 1998  | 1999  | RATE OF CHANGE |
|-----------------|-------|-------|----------------|
| FATAL           | 238   | 196   | - 17.6         |
| PERSONAL INJURY | 3,992 | 3,977 | - 0.4          |
| PROPERTY DAMAGE | 4,382 | 4,208 | - 4.0          |
| TOTAL           | 8,612 | 8,381 | - 2.7          |

**TABLE 3.2.2** 

#### 1999 DRINKING-INVOLVED CRASHES

#### CRASH TYPE BY CRASH SEVERITY

|                          | FATAL | %     | PERSONAL<br>INJURY | %     | PROPERTY<br>DAMAGE | %     | TOTAL | %     |
|--------------------------|-------|-------|--------------------|-------|--------------------|-------|-------|-------|
| ANIMAL                   | 0     | 0.0   | 4                  | 0.1   | 11                 | 0.3   | 15    | 0.2   |
| BICYCLIST                | 0     | 0.0   | 10                 | 0.3   | 2                  | 0.1   | 12    | 0.1   |
| FIXED OBJECT             | 93    | 47.5  | 1,954              | 49.1  | 1,858              | 44.2  | 3,905 | 46.6  |
| OTHER OBJECT             | 0     | 0.0   | 16                 | 0.4   | 28                 | 0.7   | 44    | 0.5   |
| PEDESTRIAN               | 10    | 5.1   | 116                | 2.9   | 3                  | 0.1   | 129   | 1.5   |
| TRAIN                    | 1     | 0.5   | 4                  | 0.1   | 1                  | 0.0   | 6     | 0.1   |
| VEHICLE IN TRANSPORT     | 61    | 31.1  | 1,265              | 31.8  | 1,466              | 34.8  | 2,792 | 33.3  |
| VEHICLE ON OTHER ROADWAY | 3     | 1.5   | 9                  | 0.2   | 7                  | 0.2   | 19    | 0.2   |
| PARKED VEHICLE           | 4     | 2.0   | 189                | 4.8   | 637                | 15.1  | 830   | 9.9   |
| NONCOLLISION OVERTURN    | 22    | 11.2  | 379                | 9.5   | 158                | 3.8   | 559   | 6.7   |
| NONCOLLISION OTHER       | 2     | 1.0   | 31                 | 0.8   | 37                 | 0.9   | 70    | 0.8   |
| TOTAL                    | 196   | 100.0 | 3,977              | 100.0 | 4,208              | 100.0 | 8,381 | 100.0 |

**TABLE 3.2.3** 

#### AREA CLASSIFICATION BY CRASH SEVERITY

|       |       |       | PERSONAL |       | PROPERTY |       |       |       |
|-------|-------|-------|----------|-------|----------|-------|-------|-------|
|       | FATAL | %     | INJURY   | %     | DAMAGE   | %     | TOTAL | %     |
| URBAN | 44    | 22.5  | 1,581    | 39.8  | 2,209    | 52.5  | 3,834 | 45.8  |
| RURAL | 152   | 77.5  | 2,396    | 60.2  | 1,999    | 47.5  | 4,547 | 54.2  |
| TOTAL | 196   | 100.0 | 3,977    | 100.0 | 4,208    | 100.0 | 8,381 | 100.0 |

**TABLE 3.2.4** 

#### 1999 DRINKING-INVOLVED CRASHES

#### ROAD CURVATURE BY CRASH SEVERITY

|          | FATAL | 0/0   | PERSONAL<br>INJURY | %     | PROPERTY<br>DAMAGE | %     | TOTAL | %     |
|----------|-------|-------|--------------------|-------|--------------------|-------|-------|-------|
| STRAIGHT | 123   | 62.8  | 2,802              | 70.7  | 3,274              | 79.4  | 6,199 | 74.8  |
| CURVE    | 73    | 37.2  | 1,160              | 29.3  | 852                | 20.6  | 2,085 | 25.2  |
| UNKNOWN  | 0     | -     | 15                 | -     | 82                 | -     | 97    | -     |
| TOTAL    | 196   | 100.0 | 3,977              | 100.0 | 4,208              | 100.0 | 8,381 | 100.0 |

**TABLE 3.2.5** 

#### 1999 DRINKING-INVOLVED CRASHES

#### ROAD INCLINE BY CRASH SEVERITY

|         | FATAL | %     | PERSONAL<br>INJURY | %     | PROPERTY<br>DAMAGE | %     | TOTAL | %     |
|---------|-------|-------|--------------------|-------|--------------------|-------|-------|-------|
| LEVEL   | 85    | 43.6  | 2,396              | 60.6  | 2,886              | 70.2  | 5,367 | 65.0  |
| HILL    | 107   | 54.9  | 1,483              | 37.5  | 1,176              | 28.6  | 2,766 | 33.5  |
| CREST   | 3     | 1.5   | 76                 | 1.9   | 51                 | 1.2   | 130   | 1.5   |
| UNKNOWN | 1     | -     | 22                 | -     | 95                 | -     | 118   | -     |
| TOTAL   | 196   | 100.0 | 3,977              | 100.0 | 4,208              | 100.0 | 8,381 | 100.0 |

**TABLE 3.2.6** 

#### ROAD CONDITIONS BY CRASH SEVERITY

|         | FATAL | %     | PERSONAL<br>INJURY | %     | PROPERTY<br>DAMAGE | %     | TOTAL | %     |
|---------|-------|-------|--------------------|-------|--------------------|-------|-------|-------|
| DRY     | 176   | 89.8  | 3,424              | 86.2  | 3,464              | 82.5  | 7,064 | 84.5  |
| WET     | 19    | 9.7   | 501                | 12.6  | 627                | 14.9  | 1,147 | 13.7  |
| SNOW    | 0     | 0.0   | 25                 | 0.6   | 56                 | 1.3   | 81    | 1.0   |
| ICE     | 1     | 0.5   | 19                 | 0.5   | 43                 | 1.0   | 63    | 0.8   |
| MUD     | 0     | 0.0   | 2                  | 0.1   | 7                  | 0.2   | 9     | 0.1   |
| UNKNOWN | 0     | -     | 6                  | -     | 11                 | -     | 17    | -     |
| TOTAL   | 196   | 100.0 | 3,977              | 100.0 | 4,208              | 100.0 | 8,381 | 100.0 |

**TABLE 3.2.7** 

#### 1999 DRINKING-INVOLVED CRASHES

#### HIGHWAY CLASSIFICATION BY CRASH SEVERITY

| 1                     | FATAL | %     | PERSONAL<br>INJURY | %     | PROPERTY<br>DAMAGE | %     | TOTAL | %     |
|-----------------------|-------|-------|--------------------|-------|--------------------|-------|-------|-------|
| INTERSTATE            | 27    | 13.8  | 382                | 9.6   | 383                | 9.1   | 792   | 9.5   |
| U.S. HIGHWAY          | 31    | 15.8  | 445                | 11.2  | 367                | 8.7   | 843   | 10.1  |
| STATE NUMBERED        | 38    | 19.4  | 694                | 17.5  | 602                | 14.3  | 1,334 | 15.9  |
| SINGLE STATE LETTERED | 39    | 19.9  | 503                | 12.7  | 309                | 7.3   | 851   | 10.2  |
| DOUBLE STATE LETTERE  | D 16  | 8.2   | 201                | 5.1   | 139                | 3.3   | 356   | 4.3   |
| OUTER ROAD            | 2     | 1.0   | 46                 | 1.2   | 43                 | 1.0   | 91    | 1.1   |
| COUNTY ROAD           | 16    | 8.2   | 663                | 16.7  | 620                | 14.7  | 1,299 | 15.5  |
| CITY STREET           | 25    | 12.8  | 960                | 24.1  | 1,614              | 38.4  | 2,599 | 31.0  |
| INTERSTATE LOOP       | 1     | 0.5   | 15                 | 0.4   | 13                 | 0.3   | 29    | 0.4   |
| OTHER <sup>1</sup>    | 1     | 0.5   | 68                 | 1.7   | 118                | 2.8   | 187   | 2.2   |
| TOTAL                 | 196   | 100.0 | 3,977              | 100.0 | 4,208              | 100.0 | 8,381 | 100.0 |

<sup>&</sup>lt;sup>1</sup> "Other" includes types of roads that are maintained by the State as well as by local jurisdictions.

**TABLE 3.2.8** 

#### 36

#### 1999 DRINKING-INVOLVED CRASHES

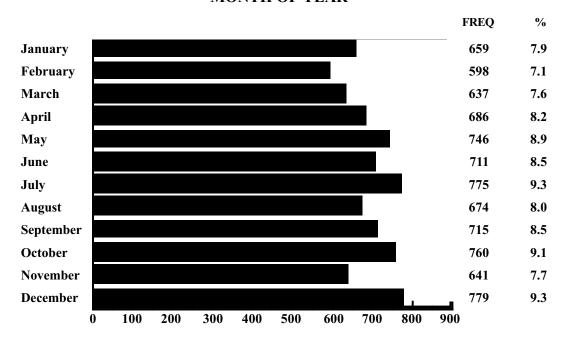
#### HIGHWAY CLASSIFICATION BY AREA CLASSIFICATION AND CRASH SEVERITY

|                          |       |       |                   | UF     | RBAN               |       |       |       |   |      |       |                   | RU     | RAL                |        |       |       |
|--------------------------|-------|-------|-------------------|--------|--------------------|-------|-------|-------|---|------|-------|-------------------|--------|--------------------|--------|-------|-------|
|                          | FATAL | %     | PERSONA<br>INJURY | L<br>% | PROPERTY<br>DAMAGE |       | TOTAL | %     | F | ATAL | %     | PERSONA<br>INJURY | L<br>% | PROPERTY<br>DAMAGE | /<br>% | TOTAL | %     |
| INTERSTATE               | 10    | 22.7  | 219               | 13.9   | 223                | 10.1  | 452   | 11.8  |   | 17   | 11.2  | 163               | 6.8    | 160                | 8.0    | 340   | 7.5   |
| U.S. HIGHWAY             | 5     | 11.4  | 167               | 10.6   | 157                | 7.1   | 329   | 8.6   |   | 26   | 17.1  | 278               | 11.6   | 210                | 10.5   | 514   | 11.3  |
| STATE NUMBERED           | 4     | 9.1   | 158               | 10.0   | 195                | 8.8   | 357   | 9.3   |   | 34   | 22.4  | 536               | 22.4   | 407                | 20.4   | 977   | 21.5  |
| SINGLE STATE<br>LETTERED | 0     | 0.0   | 41                | 2.6    | 40                 | 1.8   | 81    | 2.1   |   | 39   | 25.7  | 462               | 19.3   | 269                | 13.5   | 770   | 16.9  |
| DOUBLE STATE<br>LETTERED | 1     | 2.3   | 14                | 0.9    | 12                 | 0.5   | 27    | 0.7   |   | 15   | 9.9   | 187               | 7.8    | 127                | 6.4    | 329   | 7.2   |
| OUTER ROAD               | 0     | 0.0   | 20                | 1.3    | 28                 | 1.3   | 48    | 1.3   |   | 2    | 1.3   | 26                | 1.1    | 15                 | 0.8    | 43    | 1.0   |
| COUNTY ROAD              | 1     | 2.3   | 56                | 3.5    | 81                 | 3.7   | 138   | 3.6   |   | 15   | 9.9   | 607               | 25.3   | 539                | 27.0   | 1,161 | 25.5  |
| CITY STREET              | 22    | 50.0  | 855               | 54.1   | 1,394              | 63.1  | 2,271 | 59.2  |   | 3    | 2.0   | 105               | 4.4    | 220                | 11.0   | 328   | 7.2   |
| INTERSTATE LOOP          | 1     | 2.3   | 13                | 0.8    | 9                  | 0.4   | 23    | 0.6   |   | 0    | 0.0   | 2                 | 0.1    | 4                  | 0.2    | 6     | 0.1   |
| OTHER <sup>1</sup>       | 0     | 0.0   | 38                | 2.4    | 70                 | 3.2   | 108   | 2.8   |   | 1    | 0.7   | 30                | 1.3    | 48                 | 2.4    | 79    | 1.7   |
| TOTAL                    | 44    | 100.0 | 1,581             | 100.0  | 2,209              | 100.0 | 3,834 | 100.0 |   | 152  | 100.0 | 2,396             | 100.0  | 1,999              | 100.0  | 4,547 | 100.0 |

<sup>&</sup>lt;sup>1</sup>"Other" includes types of roads that are maintained by the State as well as by local jurisdictions.

**TABLE 3.2.9** 

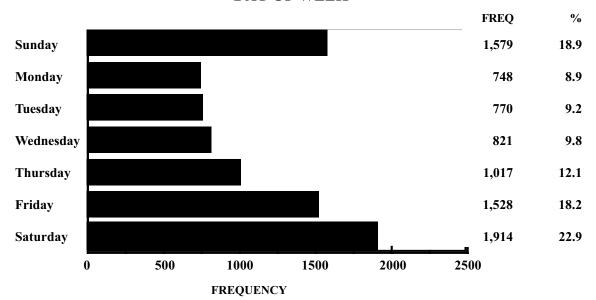
## 1999 MISSOURI DRINKING-INVOLVED CRASHES MONTH OF YEAR



**FREQUENCY** 

**FIGURE 3.2.1** 

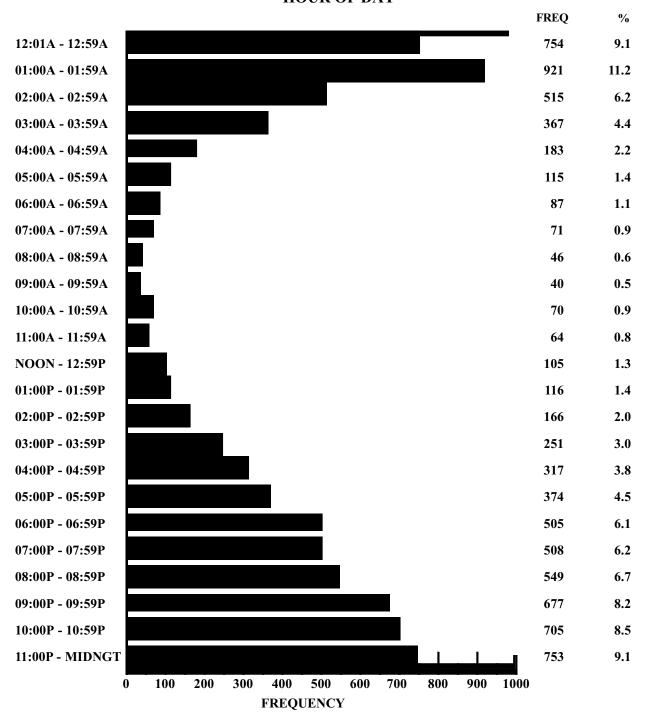
## 1999 MISSOURI DRINKING-INVOLVED CRASHES DAY OF WEEK



**Unknown Data Not Included** 

**FIGURE 3.2.2** 

## 1999 MISSOURI DRINKING-INVOLVED CRASHES HOUR OF DAY



**Unknown Data Not Included** 

**FIGURE 3.2.3** 

#### PERSONS DRINKING IN 1999 MISSOURI CRASHES

#### PERSON TYPE AND SEX BY CRASH SEVERITY

|                                      | FATAL | %     | PERSONAL<br>INJURY | %     | PROPERTY<br>DAMAGE | %     | TOTAL | %     |
|--------------------------------------|-------|-------|--------------------|-------|--------------------|-------|-------|-------|
| MALE                                 |       |       |                    |       |                    |       |       |       |
| DRIVERS<br>MOTORIZED<br>VEHICLES     | 165   | 81.3  | 3,181              | 79.3  | 3,112              | 73.6  | 6,458 | 76.5  |
| DRIVERS<br>NON-MOTORIZED<br>VEHICLES | 0     | 0.0   | 5                  | 0.1   | 3                  | 0.1   | 8     | 0.1   |
| PEDESTRIANS                          | 7     | 3.4   | 69                 | 1.7   | 3                  | 0.1   | 79    | 0.9   |
| FEMALE                               |       |       |                    |       |                    |       |       |       |
| DRIVERS<br>MOTORIZED<br>VEHICLES     | 27    | 13.3  | 674                | 16.8  | 726                | 17.2  | 1,427 | 16.9  |
| DRIVERS<br>NON-MOTORIZED<br>VEHICLES | 0     | 0.0   | 0                  | 0.0   | 0                  | 0.0   | 0     | 0.0   |
| PEDESTRIANS                          | 1     | 0.5   | 18                 | 0.4   | 0                  | 0.0   | 19    | 0.2   |
| SEX UNKNOWN                          |       |       |                    |       |                    |       |       |       |
| DRIVERS<br>MOTORIZED<br>VEHICLES     | 3     | 1.5   | 65                 | 1.6   | 383                | 9.1   | 451   | 5.3   |
| DRIVERS<br>NON-MOTORIZED<br>VEHICLES | 0     | 0.0   | 0                  | 0.0   | 0                  | 0.0   | 0     | 0.0   |
| PEDESTRIANS                          | 0     | 0.0   | 0                  | 0.0   | 0                  | 0.0   | 0     | 0.0   |
| TOTAL                                | 203   | 100.0 | 4,012              | 100.0 | 4,227              | 100.0 | 8,442 | 100.0 |

**TABLE 3.2.10** 

# DRIVERS OF MOTORIZED VEHICLES DRINKING IN 1999 MISSOURI CRASHES AGE OF DRIVER BY CRASH SEVERITY

|                          | FATAL | %     | PERSONAL<br>INJURY | %     | PROPERTY<br>DAMAGE | %     | TOTAL | %     |
|--------------------------|-------|-------|--------------------|-------|--------------------|-------|-------|-------|
| AVERAGE AGE<br>OF DRIVER | 32.8  | -     | 32.8               | -     | 34.0               | -     | 33.4  | -     |
| 15 YEARS AND UNDER       | R 0   | 0.0   | 8                  | 0.2   | 3                  | 0.1   | 11    | 0.1   |
| 16 - 20 YEARS            | 37    | 19.4  | 630                | 16.5  | 559                | 14.5  | 1,226 | 15.6  |
| 21 - 25 YEARS            | 25    | 13.1  | 695                | 18.2  | 641                | 16.6  | 1,361 | 17.3  |
| 26 - 30 YEARS            | 35    | 18.3  | 504                | 13.2  | 488                | 12.7  | 1,027 | 13.0  |
| 31 - 35 YEARS            | 25    | 13.1  | 505                | 13.2  | 524                | 13.6  | 1,054 | 13.4  |
| 36 - 40 YEARS            | 19    | 10.0  | 530                | 13.8  | 587                | 15.2  | 1,136 | 14.4  |
| 41 - 45 YEARS            | 22    | 11.5  | 398                | 10.4  | 403                | 10.5  | 823   | 10.5  |
| 46 - 50 YEARS            | 9     | 4.7   | 234                | 6.1   | 261                | 6.8   | 504   | 6.4   |
| 51 - 55 YEARS            | 6     | 3.1   | 153                | 4.0   | 161                | 4.2   | 320   | 4.1   |
| 56 - 60 YEARS            | 10    | 5.2   | 73                 | 1.9   | 93                 | 2.4   | 176   | 2.2   |
| 61 - 65 YEARS            | 1     | 0.5   | 41                 | 1.1   | 53                 | 1.4   | 95    | 1.2   |
| 66 YEARS AND OVER        | 2     | 1.1   | 58                 | 1.5   | 80                 | 2.1   | 140   | 1.8   |
| UNKNOWN                  | 4     | -     | 91                 | -     | 368                | -     | 463   | -     |
| TOTAL                    | 195   | 100.0 | 3,920              | 100.0 | 4,221              | 100.0 | 8,336 | 100.0 |

**TABLE 3.2.11** 

# DRIVERS OF NON-MOTORIZED VEHICLES DRINKING IN 1999 MISSOURI CRASHES AGE OF DRIVER BY CRASH SEVERITY

|                          | FATAL | %   | PERSONAL<br>INJURY | %     | PROPERTY<br>DAMAGE | %     | TOTAL | %     |
|--------------------------|-------|-----|--------------------|-------|--------------------|-------|-------|-------|
| AVERAGE AGE<br>OF DRIVER | 0.0   | -   | 37.8               | -     | 45.3               | -     | 40.6  | -     |
| 15 YEARS AND UNDER       | . 0   | 0.0 | 0                  | 0.0   | 0                  | 0.0   | 0     | 0.0   |
| 16 - 20 YEARS            | 0     | 0.0 | 0                  | 0.0   | 0                  | 0.0   | 0     | 0.0   |
| 21 - 25 YEARS            | 0     | 0.0 | 0                  | 0.0   | 0                  | 0.0   | 0     | 0.0   |
| 26 - 30 YEARS            | 0     | 0.0 | 0                  | 0.0   | 0                  | 0.0   | 0     | 0.0   |
| 31 - 35 YEARS            | 0     | 0.0 | 2                  | 40.0  | 0                  | 0.0   | 2     | 25.0  |
| 36 - 40 YEARS            | 0     | 0.0 | 1                  | 20.0  | 1                  | 33.3  | 2     | 25.0  |
| 41 - 45 YEARS            | 0     | 0.0 | 2                  | 40.0  | 1                  | 33.3  | 3     | 37.5  |
| 46 - 50 YEARS            | 0     | 0.0 | 0                  | 0.0   | 0                  | 0.0   | 0     | 0.0   |
| 51 - 55 YEARS            | 0     | 0.0 | 0                  | 0.0   | 1                  | 33.3  | 1     | 12.5  |
| 56 - 60 YEARS            | 0     | 0.0 | 0                  | 0.0   | 0                  | 0.0   | 0     | 0.0   |
| 61 - 65 YEARS            | 0     | 0.0 | 0                  | 0.0   | 0                  | 0.0   | 0     | 0.0   |
| 66 YEARS AND OVER        | 0     | 0.0 | 0                  | 0.0   | 0                  | 0.0   | 0     | 0.0   |
| UNKNOWN                  | 0     | -   | 0                  | -     | 0                  | -     | 0     | -     |
| TOTAL                    | 0     | 0.0 | 5                  | 100.0 | 3                  | 100.0 | 8     | 100.0 |

**TABLE 3.2.12** 

# PEDESTRIANS DRINKING IN 1999 MISSOURI CRASHES AGE OF PEDESTRIAN BY CRASH SEVERITY

|                              | FATAL | %     | PERSONAL<br>INJURY | %     | PROPERTY<br>DAMAGE | %     | TOTAL | %     |
|------------------------------|-------|-------|--------------------|-------|--------------------|-------|-------|-------|
| AVERAGE AGE<br>OF PEDESTRIAN | 44.0  | -     | 35.1               | -     | 27.5               | -     | 35.7  | -     |
| 15 YEARS AND UNDER           | 0     | 0.0   | 2                  | 2.4   | 0                  | 0.0   | 2     | 2.2   |
| 16 - 20 YEARS                | 0     | 0.0   | 12                 | 14.5  | 0                  | 0.0   | 12    | 12.9  |
| 21 - 25 YEARS                | 1     | 12.5  | 5                  | 6.0   | 1                  | 50.0  | 7     | 7.5   |
| 26 - 30 YEARS                | 0     | 0.0   | 12                 | 14.5  | 0                  | 0.0   | 12    | 12.9  |
| 31 - 35 YEARS                | 1     | 12.5  | 8                  | 9.6   | 1                  | 50.0  | 10    | 10.8  |
| 36 - 40 YEARS                | 2     | 25.0  | 14                 | 16.9  | 0                  | 0.0   | 16    | 17.2  |
| 41 - 45 YEARS                | 0     | 0.0   | 18                 | 21.7  | 0                  | 0.0   | 18    | 19.4  |
| 46 - 50 YEARS                | 1     | 12.5  | 3                  | 3.6   | 0                  | 0.0   | 4     | 4.3   |
| 51 - 55 YEARS                | 2     | 25.0  | 5                  | 6.0   | 0                  | 0.0   | 7     | 7.5   |
| 56 - 60 YEARS                | 0     | 0.0   | 2                  | 2.4   | 0                  | 0.0   | 2     | 2.2   |
| 61 - 65 YEARS                | 0     | 0.0   | 0                  | 0.0   | 0                  | 0.0   | 0     | 0.0   |
| 66 YEARS AND OVER            | 1     | 12.5  | 2                  | 2.4   | 0                  | 0.0   | 3     | 3.2   |
| UNKNOWN                      | 0     | -     | 4                  | -     | 1                  | -     | 5     | -     |
| TOTAL                        | 8     | 100.0 | 87                 | 100.0 | 3                  | 100.0 | 98    | 100.0 |

**TABLE 3.2.13** 

## DRIVERS OF MOTORIZED AND NON-MOTORIZED VEHICLES DRINKING IN 1999 MISSOURI CRASHES TYPE OF VEHICLE DRIVEN BY CRASH SEVERITY

|                           | FATAL | %     | PERSONAL<br>INJURY | %     | PROPERTY<br>DAMAGE | %     | TOTAL | %     |
|---------------------------|-------|-------|--------------------|-------|--------------------|-------|-------|-------|
| AUTOMOBILE                | 95    | 48.7  | 2,217              | 56.5  | 2,476              | 59.1  | 4,788 | 57.6  |
| SPORT UTILITY VEHICLE     | 14    | 7.2   | 292                | 7.4   | 303                | 7.2   | 609   | 7.3   |
| VAN/SMALL BUS             | 8     | 4.1   | 192                | 4.9   | 204                | 4.9   | 404   | 4.9   |
| BUS                       | 0     | 0.0   | 1                  | 0.0   | 1                  | 0.0   | 2     | 0.0   |
| SCHOOL BUS                | 0     | 0.0   | 0                  | 0.0   | 1                  | 0.0   | 1     | 0.0   |
| MOTORCYCLE                | 2     | 1.0   | 58                 | 1.5   | 12                 | 0.3   | 72    | 0.9   |
| MOPED                     | 0     | 0.0   | 3                  | 0.1   | 3                  | 0.1   | 6     | 0.1   |
| BICYCLE                   | 0     | 0.0   | 5                  | 0.1   | 2                  | 0.1   | 7     | 0.1   |
| MOTOR HOME / CAMPER       | 0     | 0.0   | 0                  | 0.0   | 1                  | 0.0   | 1     | 0.0   |
| FARM EQUIPMENT            | 0     | 0.0   | 1                  | 0.0   | 0                  | 0.0   | 1     | 0.0   |
| CONSTRUCTION<br>EQUIPMENT | 0     | 0.0   | 0                  | 0.0   | 1                  | 0.0   | 1     | 0.0   |
| OTHER TRANSPORT<br>DEVICE | 0     | 0.0   | 1                  | 0.0   | 3                  | 0.1   | 4     | 0.1   |
| PICKUP TRUCK              | 72    | 36.9  | 1,119              | 28.5  | 1,142              | 27.3  | 2,333 | 28.1  |
| OTHER TRUCKS              | 3     | 1.5   | 20                 | 0.5   | 42                 | 1.0   | 65    | 0.8   |
| ALL TERRAIN VEHICLE       | 1     | 0.5   | 14                 | 0.4   | 0                  | 0.0   | 15    | 0.2   |
| UNKNOWN                   | 0     | -     | 2                  | -     | 33                 | -     | 35    | -     |
| TOTAL                     | 195   | 100.0 | 3,925              | 100.0 | 4,224              | 100.0 | 8,344 | 100.0 |

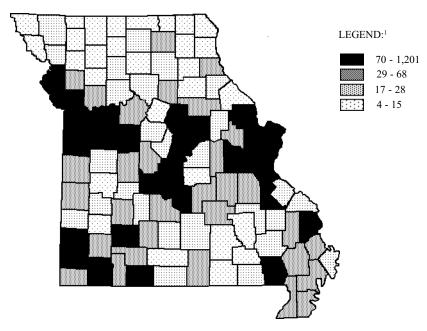
**TABLE 3.2.14** 

# DRIVERS OF MOTORIZED VEHICLES DRINKING IN 1999 MISSOURI CRASHES DRIVER'S LICENSE STATE AND TYPE BY CRASH SEVERITY

|                                | FATAL | %     | PERSONAL<br>INJURY | %     | PROPERTY<br>DAMAGE | %     | TOTAL | %     |
|--------------------------------|-------|-------|--------------------|-------|--------------------|-------|-------|-------|
| MISSOURI                       |       |       |                    |       |                    |       |       |       |
| LEARNER'S PERMIT               | 3     | 1.6   | 15                 | 0.4   | 15                 | 0.4   | 33    | 0.4   |
| FOR HIRE                       | 9     | 4.7   | 84                 | 2.3   | 90                 | 2.5   | 183   | 2.4   |
| OPERATOR'S LICENSE             | 117   | 61.6  | 2,528              | 68.7  | 2,626              | 72.7  | 5,271 | 70.4  |
| MOTORCYCLE ONLY                | 0     | 0.0   | 0                  | 0.0   | 2                  | 0.1   | 2     | 0.0   |
| COMMERCIAL<br>DRIVER'S LICENSE | 10    | 5.3   | 135                | 3.7   | 123                | 3.4   | 268   | 3.6   |
| SUBTOTAL                       | 139   | 73.2  | 2,762              | 75.0  | 2,856              | 79.0  | 5,757 | 76.9  |
| OUT STATE                      |       |       |                    |       |                    |       |       |       |
| LEARNER'S PERMIT               | 0     | 0.0   | 3                  | 0.1   | 4                  | 0.1   | 7     | 0.1   |
| FOR HIRE                       | 0     | 0.0   | 1                  | 0.0   | 4                  | 0.1   | 5     | 0.1   |
| OPERATOR'S LICENSE             | 18    | 9.5   | 344                | 9.3   | 292                | 8.1   | 654   | 8.7   |
| MOTORCYCLE ONLY                | 0     | 0.0   | 0                  | 0.0   | 0                  | 0.0   | 0     | 0.0   |
| COMMERCIAL<br>DRIVER'S LICENSE | 0     | 0.0   | 19                 | 0.5   | 24                 | 0.7   | 43    | 0.6   |
| SUBTOTAL                       | 18    | 9.5   | 367                | 10.0  | 324                | 9.0   | 709   | 9.5   |
| UNLICENSED                     | 33    | 17.4  | 553                | 15.0  | 434                | 12.0  | 1,020 | 13.6  |
| UNKNOWN                        | 5     | -     | 238                | -     | 607                | -     | 850   | -     |
| TOTAL                          | 195   | 100.0 | 3,920              | 100.0 | 4,221              | 100.0 | 8,336 | 100.0 |

**TABLE 3.2.15** 

#### COUNTY QUARTILE ANALYSIS



<sup>1</sup>LEGEND CATEGORIES ARE BASED ON QUARTILES OF COUNTIES.

| RANK | COUNTY         | FREQUENCY | PERCENT | RANK | COUNTY      | FREQUENCY | PERCENT        |
|------|----------------|-----------|---------|------|-------------|-----------|----------------|
| 1.0  | JACKSON        | 1,201     | 14.3    | 21.0 | BUTLER      | 79        | 0.9            |
| 2.0  | ST. LOUIS      | 1,055     | 12.6    | 22.5 | JOHNSON     | 78        | 0.9            |
| 3.0  | GREENE         | 374       | 4.5     | 22.5 | LINCOLN     | 78        | 0.9            |
| 4.0  | ST. LOUIS CITY | 367       | 4.4     | 24.5 | BARRY       | 75        | 0.9            |
| 5.0  | ST. CHARLES    | 358       | 4.3     | 24.5 | PULASKI     | 75        | 0.9            |
| 6.0  | JEFFERSON      | 308       | 3.7     | 26.0 | MILLER      | 74        | 0.9            |
| 7.0  | CLAY           | 247       | 2.9     | 27.0 | PETTIS      | 72        | 0.9            |
| 8.0  | BUCHANAN       | 195       | 2.3     | 28.0 | LAFAYETTE   | 70        | 0.8            |
| 9.0  | BOONE          | 191       | 2.3     |      |             | I         | First Quartile |
| 10.0 | FRANKLIN       | 177       | 2.1     |      | - — — — — - |           |                |
| 11.0 | JASPER         | 150       | 1.8     |      |             | Sec       | ond Quartile   |
| 12.0 | COLE           | 122       | 1.5     | 29.5 | CHRISTIAN   | 68        | 0.8            |
| 13.0 | CAPE GIRARDEA  | U 109     | 1.3     | 29.5 | MC DONALD   | 68        | 0.8            |
| 14.0 | PLATTE         | 102       | 1.2     | 31.5 | CRAWFORD    | 67        | 0.8            |
| 15.0 | TANEY          | 100       | 1.2     | 31.5 | PHELPS      | 67        | 0.8            |
| 16.0 | CASS           | 98        | 1.2     | 33.0 | LAWRENCE    | 63        | 0.8            |
| 17.5 | CALLAWAY       | 87        | 1.0     | 34.0 | STONE       | 56        | 0.7            |
| 17.5 | NEWTON         | 87        | 1.0     | 35.0 | SCOTT       | 53        | 0.6            |
| 19.5 | CAMDEN         | 80        | 1.0     | 37.5 | MARION      | 51        | 0.6            |
| 19.5 | ST. FRANCOIS   | 80        | 1.0     | 37.5 | MORGAN      | 51        | 0.6            |

| RANK         | COUNTY           | FREQUENCY | PERCENT       | RANK           | COUNTY           | FREQUENCY | PERCENT         |
|--------------|------------------|-----------|---------------|----------------|------------------|-----------|-----------------|
| 37.5         | PEMISCOT         | 51        | 0.6           | 78.0           | ANDREW           | 21        | 0.3             |
| 37.5         | RANDOLPH         | 51        | 0.6           | 78.0           | MISSISSIPPI      | 21        | 0.3             |
| 40.0         | HOWELL           | 50        | 0.6           | 78.0           | STE. GENEVIEVE   | 21        | 0.3             |
| 41.0         | SALINE           | 49        | 0.6           | 80.0           | MONTGOMERY       | 20        | 0.2             |
| 42.0         | LACLEDE          | 47        | 0.6           | 81.5           | BARTON           | 18        | 0.2             |
| 43.5         | DUNKLIN          | 46        | 0.5           | 81.5           | IRON             | 18        | 0.2             |
| 43.5         | POLK             | 46        | 0.5           | 84.5           | CARROLL          | 17        | 0.2             |
| 45.0         | NEW MADRID       | 44        | 0.5           | 84.5           | CHARITON         | 17        | 0.2             |
| 46.0         | AUDRAIN          | 40        | 0.5           | 84.5           | HICKORY          | 17        | 0.2             |
| 47.0         | STODDARD         | 37        | 0.4           | 84.5           | SULLIVAN         | 17        | 0.2             |
| 48.0         | WASHINGTON       | 36        | 0.4           |                |                  |           | Third Quartile  |
| 49.0         | BENTON           | 35        | 0.4           |                |                  |           |                 |
| 50.0         | WARREN           | 34        | 0.4           |                |                  |           | Fourth Quartile |
| 52.0         | CLINTON          | 32        | 0.4           | 88.5           | DAVIESS          | 15        | 0.2             |
| 52.0         | RAY              | 32        | 0.4           | 88.5           | DE KALB          | 15        | 0.2             |
| 52.0         | VERNON           | 32        | 0.4           | 88.5           | PIKE             | 15        | 0.2             |
| 54.0         | BATES            | 31        | 0.4           | 88.5           | REYNOLDS         | 15        | 0.2             |
| 55.5         | BOLLINGER        | 30        | 0.4           | 91.5           | OREGON           | 14        | 0.2             |
| 55.5         | DENT             | 30        | 0.4           | 91.5           | ST. CLAIR        | 14        | 0.2             |
| 58.0         | ADAIR            | 29        | 0.3           | 94.0           | CARTER           | 13        | 0.2             |
| 58.0         | GASCONADE        | 29        | 0.3           | 94.0           | HOWARD           | 13        | 0.2             |
| 58.0         | WEBSTER          | 29        | 0.3           | 94.0           | MONROE           | 13        | 0.2             |
|              |                  | Sec       | cond Quartile | 98.5           | ATCHISON         | 11        | 0.1             |
|              |                  |           |               | 98.5           | DOUGLAS          | 11        | 0.1             |
|              |                  |           | hird Quartile | 98.5           | LEWIS            | 11        | 0.1             |
| 60.0         | PERRY            | 28        | 0.3           | 98.5           | LINN             | 11        | 0.1             |
| 62.5         | DALLAS           | 27        | 0.3           | 98.5           | MARIES           | 11        | 0.1             |
| 62.5         | LIVINGSTON       | 27        | 0.3           | 98.5           | SCOTLAND         | 11        | 0.1             |
| 62.5         | TEXAS            | 27        | 0.3           | 102.5          | HOLT             | 10        | 0.1             |
| 62.5         | WAYNE            | 27        | 0.3           | 102.5          | SHANNON          | 10        | 0.1             |
| 67.0         | CEDAR            | 26        | 0.3           | 105.0          | CALDWELL         | 9         | 0.1             |
| 67.0         | COOPER           | 26        | 0.3           | 105.0          | GRUNDY           | 9<br>9    | 0.1             |
| 67.0         | HENRY            | 26        | 0.3           | 105.0<br>108.5 | HARRISON<br>DADE | 9<br>7    | 0.1<br>0.1      |
| 67.0<br>67.0 | OSAGE<br>RIPLEY  | 26<br>26  | 0.3<br>0.3    | 108.5          | GENTRY           | 7         | 0.1             |
| 70.0         |                  | 26<br>25  |               | 108.5          | KNOX             | 7         | 0.1             |
| 70.0<br>71.0 | WRIGHT<br>RALLS  | 25<br>24  | 0.3<br>0.3    | 108.5          | PUTNAM           | 7         | 0.1             |
| 71.0<br>72.5 |                  | 23        | 0.3           |                | CLARK            | 6         | 0.1             |
| 72.5<br>72.5 | MACON<br>MADISON | 23        | 0.3           | 111.5<br>111.5 | CLARK<br>SHELBY  | 6         | 0.1             |
| 72.3<br>75.0 | MONITEAU         | 23        | 0.3           | 111.5          | MERCER           | 5         | 0.1             |
| 75.0<br>75.0 | NODAWAY          | 22        | 0.3           | 113.5          | SCHUYLER         | 5         | 0.1             |
| 75.0<br>75.0 | OZARK            | 22        | 0.3           | 115.5          | WORTH            | 4         | 0.0             |
| 75.0         | OZAKK            | 22        | 0.5           | 113.0          | WORIII           | 4         | 0.0             |

**TABLE 3.2.16** 

#### **CITY LISTING**

| RANK | CITY              | FREQUENCY | PERCENT <sup>1</sup> |
|------|-------------------|-----------|----------------------|
| 1.0  | KANSAS CITY       | 834       | 18.8                 |
| 2.0  | ST. LOUIS         | 367       | 8.3                  |
| 3.0  | SPRINGFIELD       | 281       | 6.3                  |
| 4.0  | INDEPENDENCE      | 201       | 4.5                  |
| 5.0  | ST. JOSEPH        | 164       | 3.7                  |
| 6.0  | COLUMBIA          | 114       | 2.6                  |
| 7.0  | ST. CHARLES       | 102       | 2.3                  |
| 8.0  | LEE'S SUMMIT      | 77        | 1.7                  |
| 9.0  | JOPLIN            | 75        | 1.7                  |
| 10.0 | MARYLAND HEIGHTS  | 67        | 1.5                  |
| 11.0 | JEFFERSON CITY    | 61        | 1.4                  |
| 12.5 | CAPE GIRARDEAU    | 57        | 1.3                  |
| 12.5 | ST. PETERS        | 57        | 1.3                  |
| 14.0 | BLUE SPRINGS      | 56        | 1.3                  |
| 15.0 | FLORISSANT        | 47        | 1.1                  |
| 16.0 | O'FALLON          | 44        | 1.0                  |
| 17.0 | BRIDGETON         | 40        | 0.9                  |
| 18.5 | CHESTERFIELD      | 39        | 0.9                  |
| 18.5 | RAYTOWN           | 39        | 0.9                  |
| 20.5 | SEDALIA           | 36        | 0.8                  |
| 20.5 | TOWN AND COUNTRY  | 36        | 0.8                  |
| 22.0 | GRANDVIEW         | 35        | 0.8                  |
| 23.0 | NORTH KANSAS CITY | 34        | 0.8                  |
| 24.5 | ARNOLD            | 31        | 0.7                  |
| 24.5 | HANNIBAL          | 31        | 0.7                  |
| 26.0 | HAZELWOOD         | 30        | 0.7                  |
| 27.0 | WARRENSBURG       | 27        | 0.6                  |
| 28.0 | FERGUSON          | 26        | 0.6                  |
| 29.0 | UNIVERSITY CITY   | 25        | 0.6                  |
| 30.0 | WASHINGTON        | 24        | 0.5                  |
| 31.5 | GLADSTONE         | 23        | 0.5                  |
| 31.5 | POPLAR BLUFF      | 23        | 0.5                  |
| 33.0 | SIKESTON          | 22        | 0.5                  |
| 34.5 | FULTON            | 21        | 0.5                  |
| 34.5 | RICHMOND HEIGHTS  | 21        | 0.5                  |

 $<sup>^{1}</sup>$ Percentage is based on drinking-involved crashes which occurred in Missouri municipalities with populations of 1,000 or more. Only those municipalities comprising 0.5% or more of these crashes are listed.

**TABLE 3.2.17** 

## MISSOURI FATAL AND PERSONAL INJURY DRINKING-INVOLVED CRASHES ANNUAL TIME SERIES

